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Top Ten Things To Know
Perioperative Beta Blocker Therapy

1. A reduction in primary cardiac events (cardiovascular death, MI and cardiac arrest) with perioperative therapy with beta blockers has been shown previously.
2. An increased risk of stroke and total mortality when routine administration of higher-dose long-acting metoprolol in beta-blocker-naïve patients on the day of surgery have resulted from a hypotensive state leading to shock.
3. This 2009 Update addresses limitations in the literature on when to use beta blockers perioperatively and how to reduce cardiovascular complications such as hypotension during noncardiac surgery.
4. The 2009 Update supports the continuation of beta blockers in patients undergoing surgery who are receiving beta blockers for ACCF/AHA Class I guideline indications.
5. Perioperative beta-blocker withdrawal should be avoided unless necessary, although data are limited. Titration rate control with beta blockers should continue throughout the preoperative, intraoperative, and postoperative period (Class I indication), if possible, to maintain a heart rate of 60 to 80 bpm while avoiding hypotension and bradycardia.
6. The Class III recommendation was updated to reflect that routine administration of high-dose beta blockers in the absence of dose titration for patients undergoing noncardiac surgery is not useful.
7. The 2009 Update removed the Class I recommendation suggesting that beta blockers should be given to patients undergoing vascular surgery who are at high cardiac risk if the patient has ischemia was combined with a Class IIa recommendation.
8. Titrating beta blockers to heart rate and blood pressure for patients, whose preoperative assessment identifies high cardiac risk, as defined by the presence of more than 1 clinical risk factor, changed the level of evidence of the current 2007 Class IIa recommendation from B to C.
9. Perioperative use of beta blockers is a class 1 indication only for those already on beta blockers and for patients with a positive stress test undergoing vascular surgery. For most other patients, the indications for beta-blocker use are Class IIa or class IIIb.
10. Ongoing and future studies are necessary to address existing limitations in the evidence base of when to use beta blockers perioperatively in a noncardiac surgery setting and how to properly control blood pressure or heart rate.

Fleischmann, et al; 2009 ACCF/AHA focused update on perioperative beta blockade: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *Circulation* 2009: published online before print November 2, 2009, 10.1161/CIRCULATIONAHA.109.192689.
http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.109.192689